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Idaho State
Department of
Agriculture

Natural
Resources
Conservation
Service



Idaho

Basin Outlook Report

May 1, 1996



Basin Outlook Reports and Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

Your local Natural Resources Conservation Service Office

or

Natural Resources Conservation Service

Snow Surveys

3244 Elder Street, Room 124

Boise, ID 83705-4711

(208) 378-5740

How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

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IDAHO WATER SUPPLY OUTLOOK REPORT

MAY 1, 1996

SUMMARY

Cool weather and heavy mountain precipitation during April has virtually guaranteed an abundant water supply for Idaho in 1996. With the exception of the Idaho Panhandle, most areas of the state are reporting above average snowpack conditions for May 1. Most streamflow forecasts call for above normal volumes this spring, and reservoirs have been drafted to catch the anticipated high flows. Water supplies should be more than adequate for all uses this year. Conservative use of this season's water supply should provide good carryover storage at the end of the year... a wise insurance policy for next year.

SNOWPACK

April brought snow to the high country and rain to the valleys. Most higher elevation SNOTEL sites showed a net increase in snow water content from last month while lower elevation sites are melting. Overall, snowpack percentages increased significantly from last month as a result of above normal precipitation and delayed snowmelt. Currently, the Panhandle Region reports 88% of average snowpack while the Clearwater basin is normal. The west-central mountains, Salmon, Wood/Lost and southern Idaho basins are 10-20% above average. The Upper Snake basin continues to report the highest percentages in the region, 120-140% of average. Cool weather in early May continues to delay snowmelt in Idaho. With deep snowpacks persisting in the high elevations this late in the spring, there is a good chance of high streamflows when the melt season begins in earnest.

PRECIPITATION

April was another wet month with all drainage basins reporting above average precipitation. Heavy rains during the last week of April brought rapid rises in many streams in the Panhandle region and Clearwater basin. Some SNOTEL sites in the Clearwater basin received 2-3 inches of moisture in 24 hours. April precipitation was highest in the west-central mountains at 223% of average. Precipitation in northern and east-central Idaho ranged from 150-180% of average. Elsewhere in the state, precipitation was 137% of average in the Upper Snake basin and slightly above normal across southern Idaho. Precipitation for the water year is above average statewide, ranging from 111% of average in Idaho's southern and eastern basins to 141% in the Clearwater basin.

RESERVOIRS

Idaho reservoirs are in good shape this year. Releases for flood control are continuing at numerous reservoirs across the state. Nearly all major reservoirs will fill this year with the exception of Salmon Falls, Oakley and Bear Lake. Owyhee and Wildhorse reservoirs have already filled once this year. The upper Snake reservoir system is currently 63% of capacity. Palisades Reservoir will start filling around May 1 and American Falls Reservoir will fill in June. Mackay, Little Wood and Magic reservoirs are 80-90% of capacity. The Boise reservoir system is 64% full while the Payette system is 77% full. Cascade Reservoir will pass inflow until mid-May and is expected to fill in mid-to-late June. Dworshak Reservoir is 76% of capacity. Coeur d'Alene and Pend Oreille lakes are passing inflows, and both have above average storage for this time of year.

Note: NRCS reports reservoir information in terms of usable volumes, which includes both active, inactive, and in some cases dead storage. Other operators may report reservoir contents in different terms. For additional information, see the reservoir definitions in the back of this report.

STREAMFLOW

Streamflows have been above average nearly every month this water year. April flows ranged from 115% of average in the Teton basin to 170% in the Payette and Salmon basins. April runoff was the result of heavy precipitation and low elevation snowmelt; high elevation snowpacks are just beginning to melt. Streamflow forecasts for the May-July period call for above normal volumes across most of the state. The Panhandle and Clearwater streams are forecast at 85-100% of average while the Payette, Boise and upper Snake streams are forecast at 120-135% of average. The Wood, Lost and southern Idaho streams are forecast at 100-115% of average. With above average snow conditions across most of the state, there is a potential for high flows when the melt season begins. Spring temperatures and additional precipitation will determine the magnitude and timing of the seasonal peak flows.

RECREATION OUTLOOK

The recreation outlook for Idaho calls for water, water, and more water. Snowpacks throughout the state are near or above average, most reservoirs are expected to fill, and good streamflows should persist well into the summer. The cool and wet spring conditions promise high streamflows when the melt season finally begins. Northern Idaho streams (Lochsa and Selway) promise excellent spring boating conditions. The Salmon and Payette basins report some of the highest streamflow forecasts in the state, and high water should be expected this year. The southwestern desert rivers (Jarbidge, Owyhee, and Bruneau) will also have an excellent boating season. Forecasts for the Snake River call for well above normal flows. Most major reservoirs are expected to fill (with the exception of Salmon Falls and Bear Lake), and good inflows well into June and July should keep reservoirs full later than normal.

WATER SUPPLY FORECASTING PRODUCTS ON THE INTERNET

On February 1, the Water and Climate Center (WCC) began providing Snow Survey and Water Supply Forecasting products on the INTERNET. A few of our more popular products (SNOTEL Update Reports, State Basin Outlook Reports, and products previously published in the Water Supply Outlook for the Western United States) are now accessible via our new Home Page and our Anonymous FTP server.

The Universal Resource Locator (URL) for the home page is: <http://www.wcc.nrcs.usda.gov/>

The address for the Anonymous FTP server is: <ftp.wcc.nrcs.usda.gov>

You can access the Anonymous FTP server using your INTERNET browser (Netscape, Mosaic, etc.) by changing the URL to: <ftp://ftp.wcc.nrcs.usda.gov/>

We will continue to add more products to the Home Page and Anonymous FTP server and welcome any comments and suggestions you might have. Questions and comments should be directed to the NRCS Snow Survey and Water Supply Forecasting contact in your state or:

Chris Pacheco (503) 414-3056 a16cpacheco@attmail.com

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IDAHO SURFACE WATER SUPPLY INDEX (SWSI)

As of May 1, 1996

The surface water supply index (swsi) is predictive indicator of surface water availability within a watershed for the spring and summer water use season. The index is calculated by combining pre-runoff reservoir storage (carryover) with forecasts of spring and summer streamflow. SWSI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry), with a value of zero indicating a median water supply as compared to historical occurrences.

SWSI values are published January through May, and provide a more comprehensive outlook of water availability than either streamflow forecasts or reservoir storage figures alone. The SWSI index allows comparison of water availability between basins for drought or flood severity analysis. Threshold SWSI values have been established for most basins to indicate the potential for agricultural water shortages.

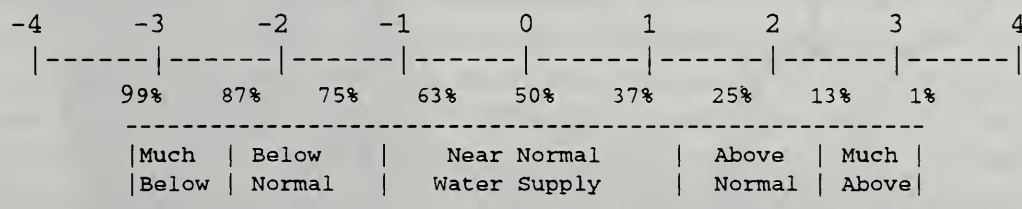
The following agencies and cooperators provide assistance in the preparation of the Surface Water Supply Index for Idaho:

US Department of Commerce, National Weather Service
US Bureau of Reclamation
Idaho Water Users Association

US Army Corps of Engineers
Idaho Department of Water Recourses
PacifiCorp

<i>BASIN or REGION</i>	<i>SWSI Value</i>	<i>Most Recent Year With Similar SWSI Value</i>	<i>Agricultural Water Supply Shortage May Occur When SWSI is Less Than</i>
PANHANDLE	0.1	1985	NA
CLEARWATER	1.4	1981	NA
SALMON	2.0	1978	NA
WEISER	0.9	1978	NA
PAYETTE	3.0	1984	NA
BOISE	2.2	1986	-2.6
BIG WOOD	0.5	1993	-1.4
LITTLE WOOD	1.3	1993	-2.1
BIG LOST	0.7	1987	-0.8
LITTLE LOST	1.6	1993	0.0
HENRYS FORK	2.1	1986	-3.3
SNAKE (AMERICAN FALLS)	3.0	1982	-2.0
OAKLEY	1.8	1985	0.0
SALMON FALLS	2.7	1980	0.0
BRUNEAU	1.5	1993	NA
OWYHEE	1.2	1993	NA
BEAR RIVER	-2.2	1989	-3.8

SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION









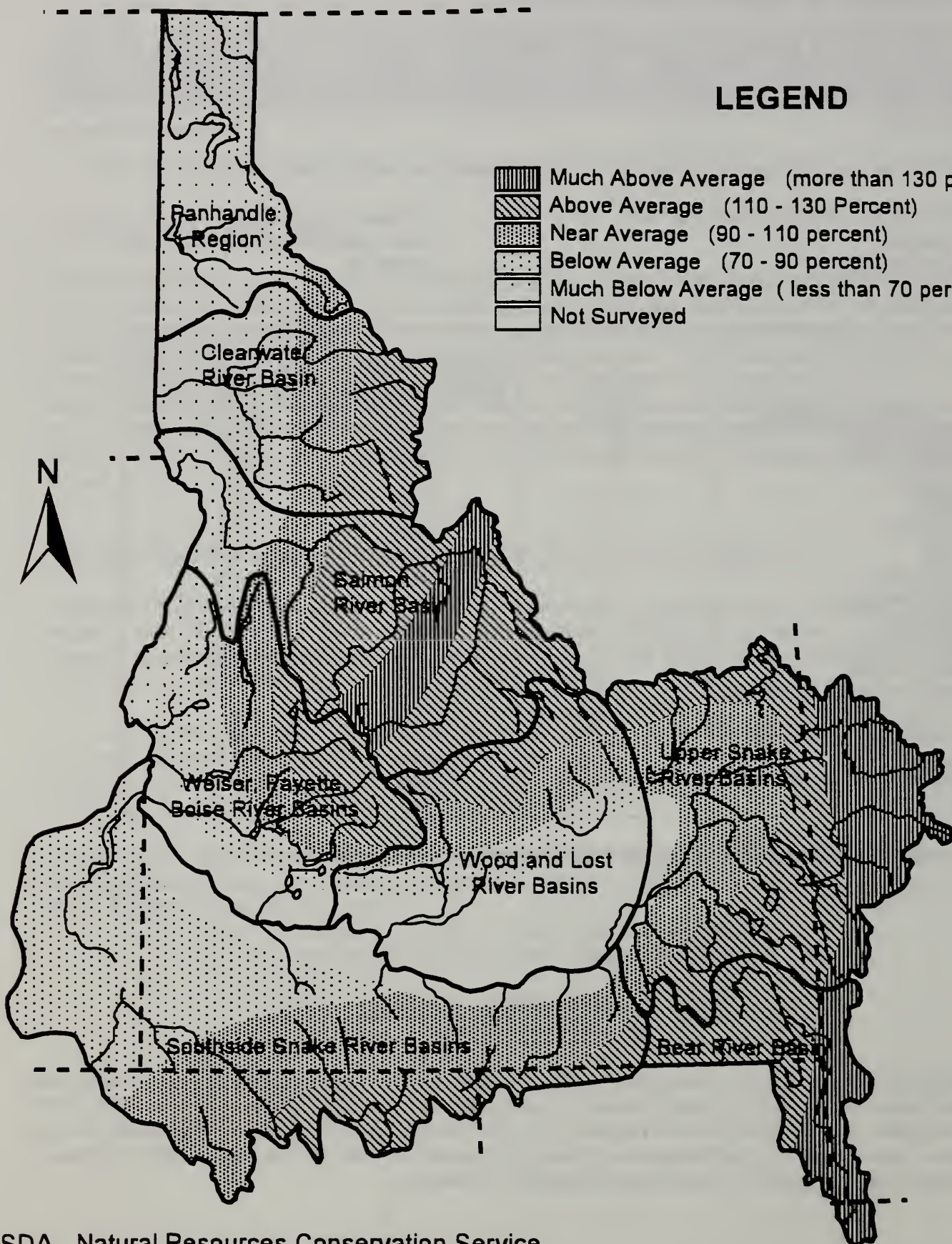
Note: The Percent Chance of Exceedance is an indicator of how often a range of SWSI values might be expected to occur. Each SWSI unit represents about 12% of the historical occurrences. As an example of interpreting the above scale, the SWSI can be expected to be greater than -3.0, 87% of the time and less than -3.0, 13% of the time. Half the time, the SWSI will be below and half the time above a value of zero. The interval between -1.5 and +1.5 described as "Near Normal Water Supply", represents three SWSI units and would be expected to occur about one third (36%) of the time.

Idaho Mountain Snowpack

May 1, 1996

LEGEND

-  Much Above Average (more than 130 percent)
-  Above Average (110 - 130 Percent)
-  Near Average (90 - 110 percent)
-  Below Average (70 - 90 percent)
-  Much Below Average (less than 70 percent)
-  Not Surveyed

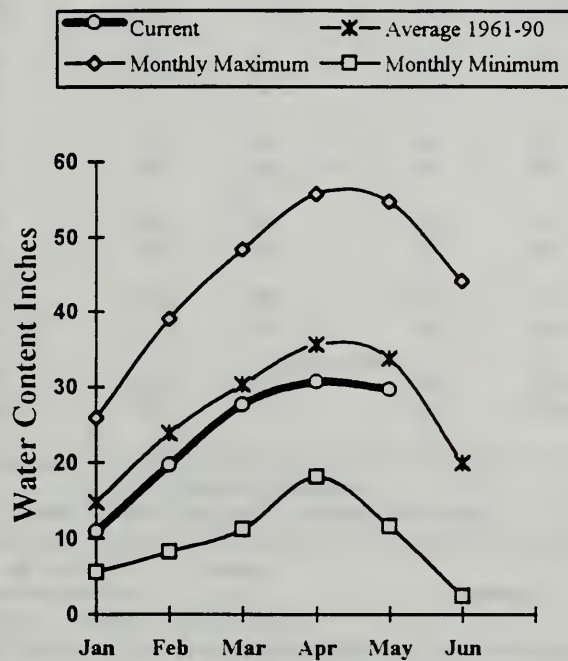


PANHANDLE REGION

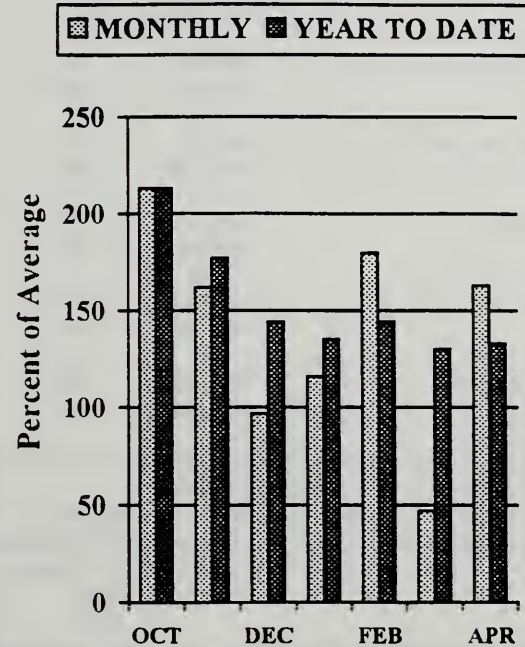
MAY 1, 1996



**Mountain Snowpack (inches)
PANHANDLE REGION**



**Mountain Precipitation
PANHANDLE REGION**



WATER SUPPLY OUTLOOK

Heavy rains during the last week of April brought rapid rises in many streams. The Couer d'Alene and St. Joe rivers reached flood stage again as a result of the heavy rainfall. April precipitation was 163% of average in the Panhandle region with some SNOTEL sites reporting as much as 210% of average for the month. Precipitation for the water year remains well above average at 133%. The late April rain event started melting snow in the 5,000-6,000 foot elevation range, but the higher elevation snowpack is just starting to melt. The snowpack is now 88% of average for the Panhandle region as a whole. The St. Joe River basin reports 97% of average snowpack while the Pend Oreille basin is 104%. Couer d'Alene Lake is currently 68% above its normal summer level. Current streamflow forecasts call for 88% of average for the Couer d'Alene River while the St. Joe River is forecast at 103% of average. The Montana rivers are still forecast at above average and range from 110-114% of average. The potential for high streamflows still exists for many high elevation streams in northern Idaho. Residents in flood prone areas -- especially where dikes and other protective structures were damaged in previous flood events -- should monitor the situation closely during the runoff season.

PANHANDLE REGION
Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	<==== Drier ===== Future Conditions ===== Wetter =====>						
				Chance Of Exceeding *				30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
KOOTENAI at Leonia (1,2)	MAY-JUL	6006	6800	7160	115	7520	8314	6223
	MAY-SEP	7143	8069	8490	116	8911	9837	7304
CLARK FK at Whitehorse Rpds (1,2)	MAY-JUL	9188	10434	11000	110	11566	12812	10020
	MAY-SEP	10377	11768	12400	111	13032	14423	11200
PEND OREILLE Lake Inflow (1,2)	MAY-JUL	10745	12089	12700	115	13311	14655	11070
	MAY-SEP	12030	13522	14200	116	14878	16370	12290
PRIEST nr Priest River (1,2)	MAY-JUL	530	640	690	110	740	850	627
	MAY-SEP	590	700	750	110	800	910	680
COEUR D'ALENE at Enaville	MAY-JUL	299	368	415	88	462	531	472
	MAY-SEP	341	412	460	90	508	579	512
ST. JOE at Calder	MAY-JUL	774	855	910	103	965	1046	881
	MAY-SEP	839	923	980	103	1037	1121	949
SPOKANE near Post Falls (2)	MAY-JUL	1375	1592	1740	100	1888	2105	1749
	MAY-SEP	1469	1690	1840	100	1990	2211	1846
SPOKANE at Long Lake	MAY-JUL	1588	1815	1970	100	2125	2352	1975
	MAY-SEP	1809	2042	2200	100	2358	2591	2198

PANHANDLE REGION Reservoir Storage (1000 AF) - End of April					PANHANDLE REGION Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
HUNGRY HORSE	3451.0	1803.0	2017.0	2043.0	Kootenai ab Bonners Ferry	30	108	99
FLATHEAD LAKE	1791.0	1224.0	690.7	937.2	Moyie River	3	124	106
NOXON RAPIDS	335.0	324.3	326.8	208.7	Priest River	5	73	66
PEND OREILLE	1561.3	1079.5	972.3	920.7	Pend Oreille River	93	118	104
COEUR D'ALENE	238.5	399.5	140.5	246.7	Rathdrum Creek	1	29	29
PRIEST LAKE	119.3	78.0	86.0	96.2	Hayden Lake	0	0	0
					Coeur d'Alene River	7	81	57
					St. Joe River	2	121	97
					Spokane River	10	87	66
					Palouse River	1	0	0

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

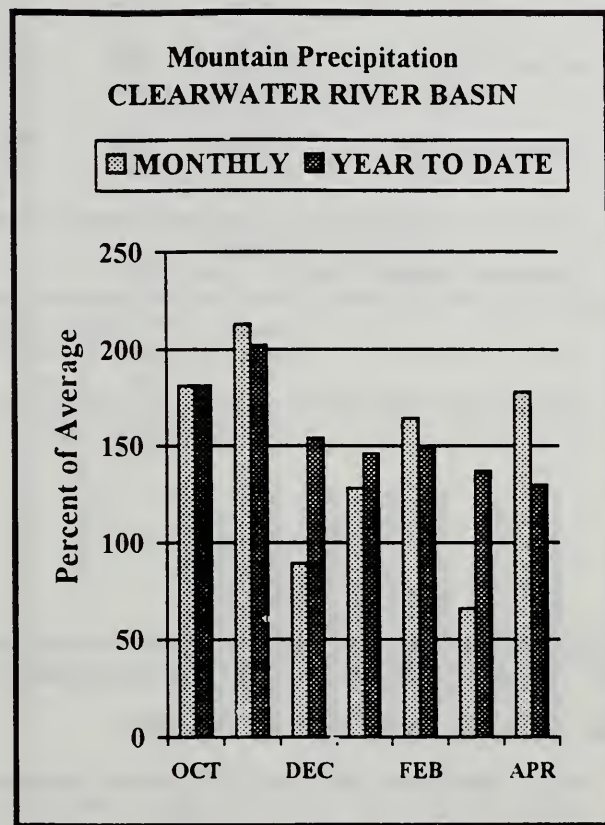
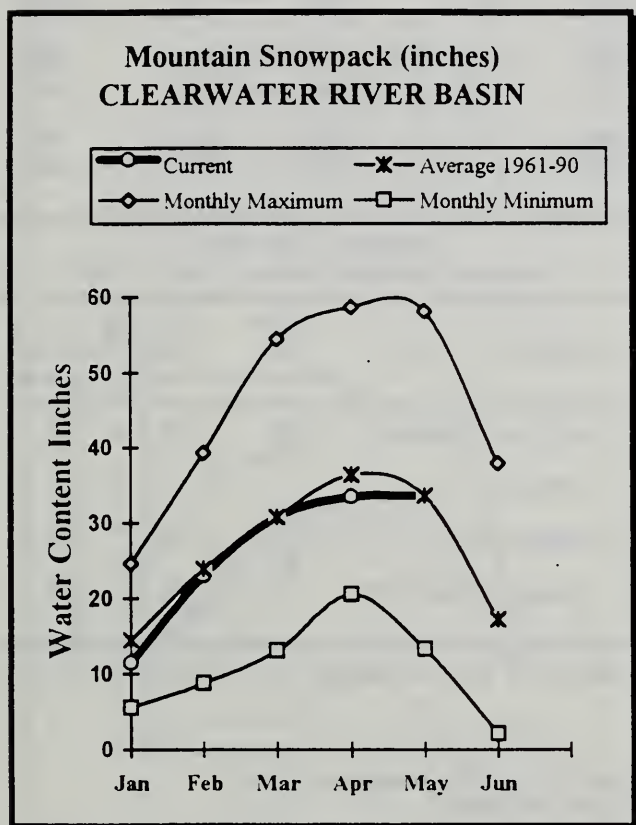
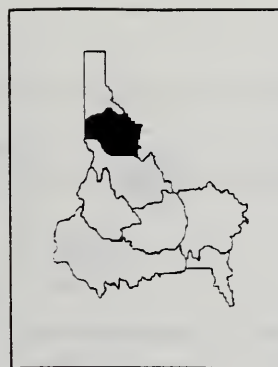
The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream water management.

CLEARWATER RIVER BASIN

MAY 1, 1996



WATER SUPPLY OUTLOOK

Heavy precipitation fell during April with the basin receiving 178% of average for the month. The Clearwater basin continues to report the highest yearly precipitation in the state at 141% of average. Some precipitation stations are setting new records for the highest precipitation catch for the water year to date. A particularly heavy storm event in late April brought 2-3 inches of precipitation in 24 hours at some SNOTEL sites. This caused sharp rises in many streams. Currently, the snowpack ranges from 97% of average in the North Fork Clearwater basin to 107% in the Lochsa basin. Dworshak Reservoir is currently storing 2,623,500 acre-feet, 76% of capacity. Streamflow forecasts call for 97-101% of average for the Clearwater basin streams. The potential for high streamflows still exists for many higher elevation streams in northern Idaho. Residents in flood prone areas -- especially where dikes and other protective structures were damaged from previous flood events -- should monitor the situation closely during the runoff season.

CLEARWATER RIVER BASIN
Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	<==== Drier ==== Future Conditions ==== Wetter =====>						
				Chance Of Exceeding *				30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
DWRSHAK RESV INFLOW (2)	MAY-JUL	1711	1913	2050	101	2187	2389	2029
	MAY-SEP	1893	2100	2240	102	2380	2587	2202
CLEARWATER at Orofino (1)	MAY-JUL	2930	3576	3870	101	4164	4810	3831
	MAY-SEP	3145	3836	4150	102	4464	5155	4089
CLEARWATER at Spalding (1,2)	MAY-JUL	4512	5391	5790	97	6189	7068	5972
	MAY-SEP	4997	5941	6370	100	6799	7743	6405

CLEARWATER RIVER BASIN Reservoir Storage (1000 AF) - End of April					CLEARWATER RIVER BASIN Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
DWRSHAK	3459.0	2623.5	2965.2	2276.0	North Fork Clearwater	10	120	97
					Lochsa River	4	133	107
					Selway River	5	134	103
					Clearwater Basin Total	17	124	99

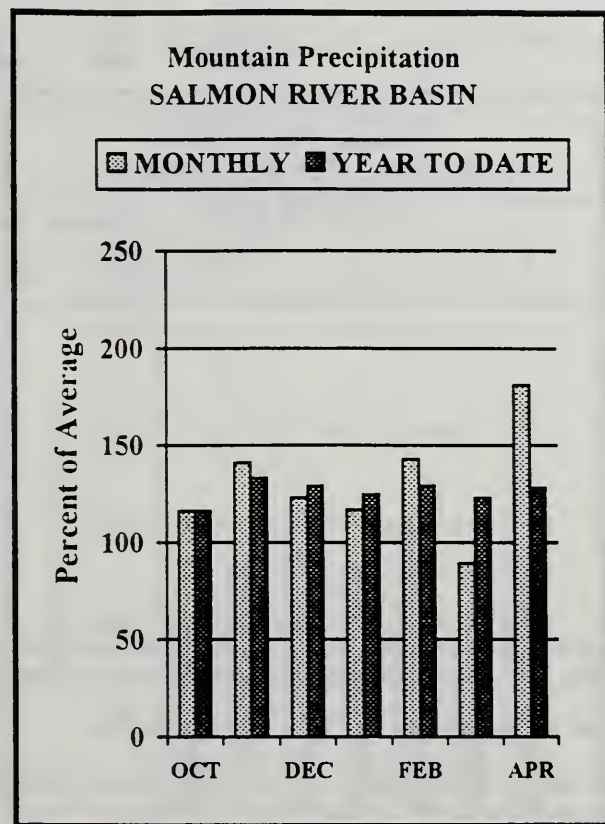
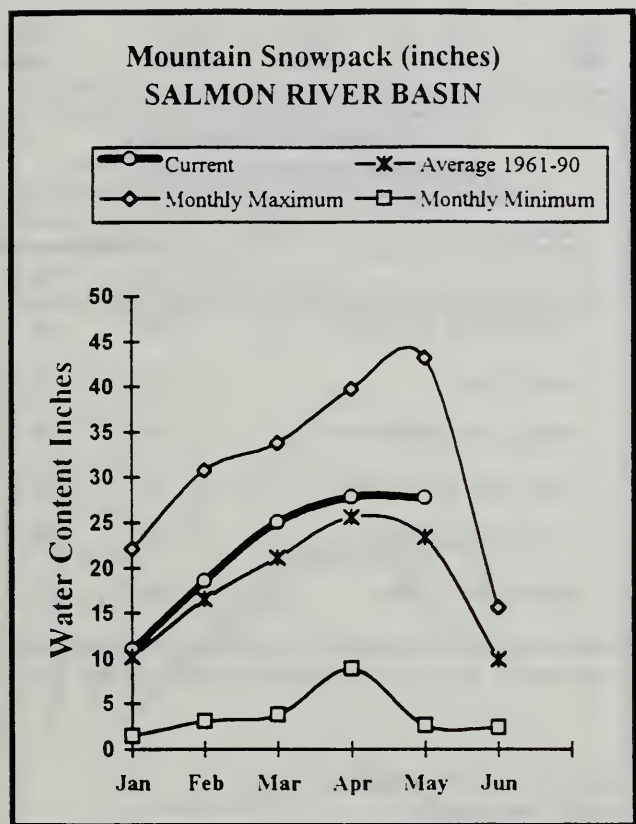
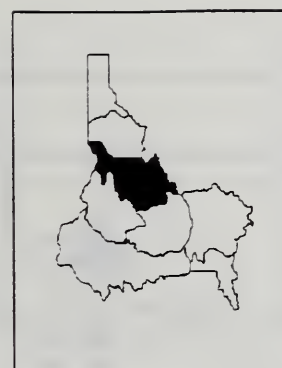
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
 (2) - The value is natural flow - actual flow may be affected by upstream water management.

SALMON RIVER BASIN

MAY 1, 1996



WATER SUPPLY OUTLOOK

April precipitation was 181% of average in the Salmon basin with some SNOTEL sites receiving 2-3 times the normal for the month. Precipitation for the water year to date is 128% of average, the highest in several years. The mountain snowpack increased at most SNOTEL sites in the basin during April. Snowpack percentages increased significantly from last month -- partly due to heavy snowfall and partly due to delayed snowmelt. The snowpack is currently 130% of average for the Salmon River above Salmon and 132% for the Middle Fork Salmon River. Overall, the snowpack in the Salmon basin is 117% of average. Streamflow forecasts for the May-July period call for 117% of average for the Salmon River at Salmon and 113% for the Salmon River at White Bird. River runners can expect an extended boating season with the potential for high streamflows as a result of the good snow conditions. Water supplies will be abundant again this year in the Salmon River basin.

SALMON RIVER BASIN
Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	<<==== Drier ==== Future Conditions ==== Wetter >>>						
		====		Chance Of Exceeding *		====		30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
SALMON at Salmon (1)	MAY-JUL	612	810	900	117	990	1188	772
	MAY-SEP	736	972	1080	117	1188	1424	922
SALMON at White Bird (1)	MAY-JUL	4853	5628	5980	113	6332	7107	5284
	MAY-SEP	5487	6356	6750	114	7144	8013	5930

SALMON RIVER BASIN Reservoir Storage (1000 AF) - End of April					SALMON RIVER BASIN Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Salmon River ab Salmon	8	101	130
					Lemhi River	5	86	115
					Middle Fork Salmon River	3	115	132
					South Fork Salmon River	3	103	115
					Little Salmon River	4	89	100
					Salmon Basin Total	24	100	117

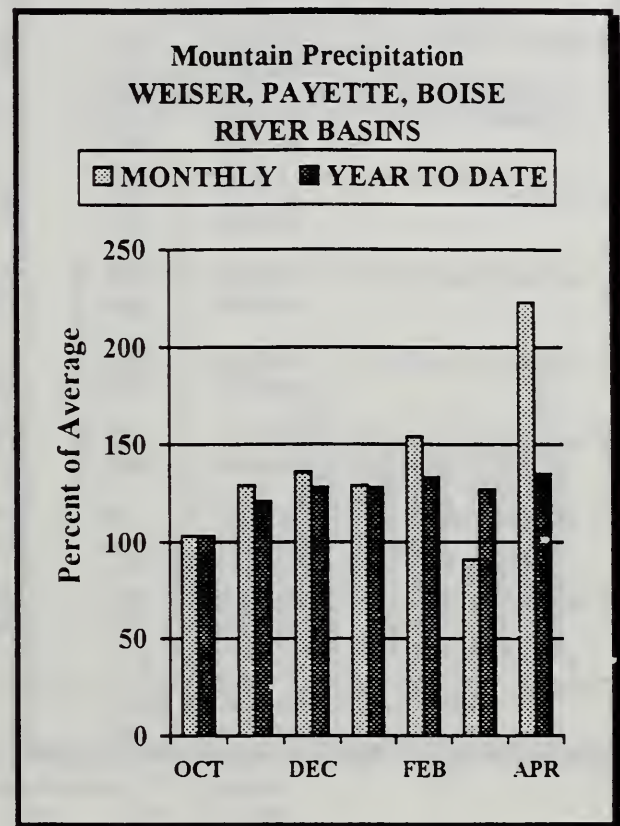
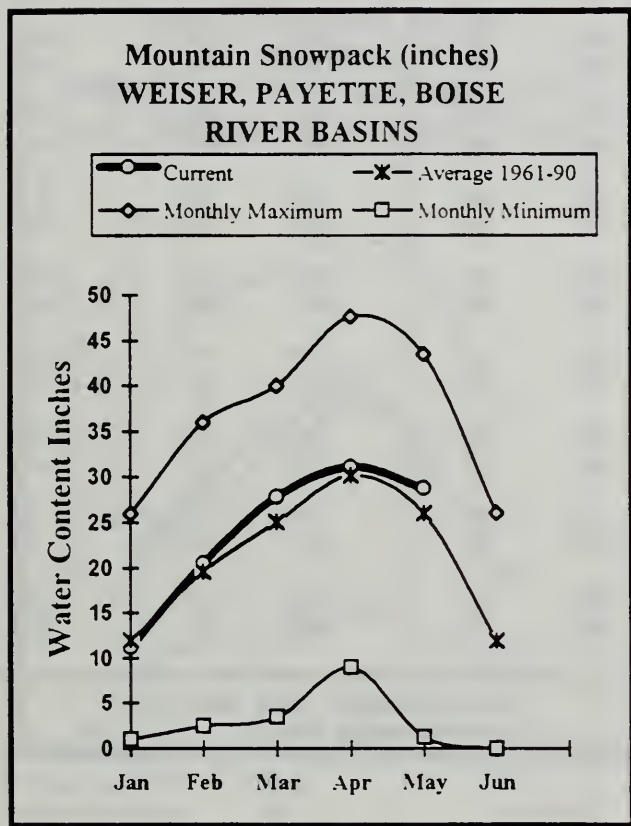
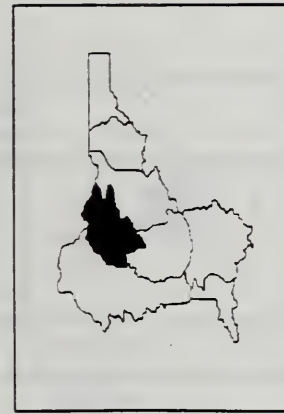
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream water management.

WEISER, PAYETTE, BOISE RIVER BASINS MAY 1, 1996



WATER SUPPLY OUTLOOK

April precipitation was more than twice normal in the west-central mountains. Deadwood Summit SNOTEL site, along the Payette/Salmon river divide, received 9.0 inches of precipitation; normal April precipitation is 3.6 inches. Precipitation for the water year is 135% in these basins. Low elevation snowpacks are starting to melt but temperatures were cold enough to allow snow to fall in the higher county. Snowpack percentages increased from last month and are currently 110% of average in the Payette basin and 109% in the Boise basin. Storage in the Boise reservoir system is currently 92% of average (64% of capacity) while the Payette system reports 129% of average storage (77% of capacity). Flood control releases have been made from the Boise and Payette systems; the reservoirs should be in good shape to handle the heavy runoff expected this spring. Streamflow forecasts for the May-July period call for 133% of average for Boise River near Boise and 136% for the Payette near Horseshoe Bend. The heavy snowpacks and above normal runoff forecasts are very similar to last year's conditions and promise high water extending late into the summer. Water supplies will be more than adequate this year.

WEISER, PAYETTE, BOISE RIVER BASINS
Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	<==== Drier ===== Future Conditions ===== Wetter =====>						
		90%		Chance Of Exceeding *		30%		30-Yr Avg.
		(1000AF)	(1000AF)	50% (Most Probable)	10% (Most Probable)	(1000AF)	(1000AF)	
				(1000AF)	(% AVG.)			(1000AF)
WEISER nr Weiser (1)	MAY-JUL	141	237	280	112	323	419	250
SF PAYETTE at Lowman	MAY-JUL	427	452	469	125	486	511	375
	MAY-SEP	489	516	534	124	552	579	431
DEADWOOD RESERVOIR Inflow (1,2)	MAY-JUL	136	151	158	132	165	180	120
	MAY-SEP	145	161	168	132	175	191	127
NF PAYETTE nr Cascade (1,2)	MAY-JUL	434	500	530	130	560	626	407
	MAY-SEP	472	543	575	130	607	678	442
NF PAYETTE nr Banks (2)	MAY-JUL	561	623	665	130	707	769	512
	MAY-SEP	607	674	720	130	766	833	554
PAYETTE nr Horseshoe Bend (1,2)	MAY-JUL	1527	1694	1770	136	1846	2013	1304
	MAY-SEP	1665	1847	1930	134	2013	2195	1442
BOISE near Twin Springs (1,2)	MAY-JUL	591	645	670	132	695	749	509
	MAY-SEP	660	718	745	132	772	830	564
SF BOISE at Anderson Rnch Dm (1,2)	MAY-JUL	451	523	555	129	587	659	432
	MAY-SEP	489	567	602	128	637	715	470
MORES CK nr Arrowrock Dam	MAY-JUL	90	97	102	133	107	114	77
	MAY-SEP	96	104	109	132	114	121	82
BOISE nr Boise (1,2)	MAY-JUL	1251	1388	1450	133	1512	1649	1090
	MAY-SEP	1385	1533	1600	133	1667	1815	1204

WEISER, PAYETTE, BOISE RIVER BASINS
Reservoir Storage (1000 AF) - End of April

WEISER, PAYETTE, BOISE RIVER BASINS
Watershed Snowpack Analysis - May 1, 1996

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
MANN CREEK	11.1	11.1	11.0	10.4	Mann Creek	1	39	54
CASCADE	703.2	535.0	527.2	411.7	Weiser River	3	68	85
DEADWOOD	161.9	128.0	83.6	101.1	North Fork Payette	7	94	103
ANDERSON RANCH	464.2	312.5	203.4	327.2	South Fork Payette	4	108	119
ARROWROCK	286.6	198.9	243.1	214.9	Payette Basin Total	12	100	110
LUCKY PEAK	293.2	152.7	237.0	182.9	Middle & North Fork Boise	6	96	111
LAKE LOWELL (DEER FLAT)	align="center">177.1	align="center">135.2	align="center">147.2	align="center">169.8	South Fork Boise River	6	93	119
					Mores Creek	4	94	94
					Boise Basin Total	12	95	109
					Canyon Creek	0	0	0

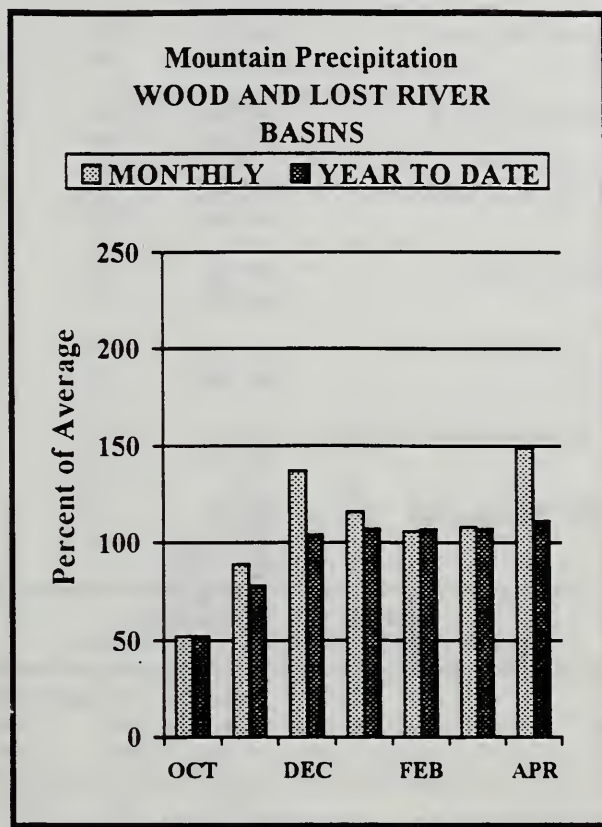
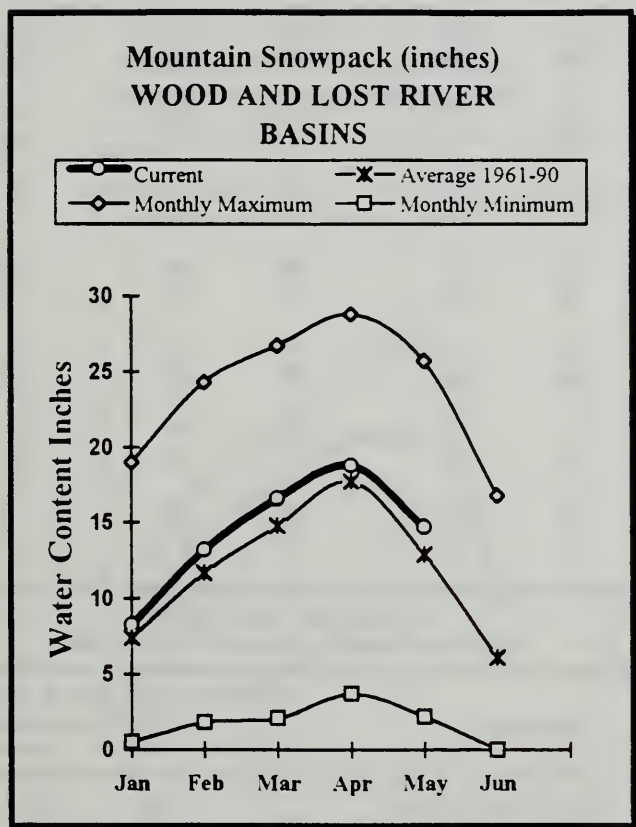
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream water management.

WOOD and LOST RIVER BASINS MAY 1, 1996



WATER SUPPLY OUTLOOK

April precipitation in the Wood and Lost basins was 149% of average, bringing the total for the water year to 111%. The snowpack increased during April at all but the lower elevation sites. Currently, the snowpack in the Big and Little Wood basins is 120% of average, while the Big and Little Lost basins are reporting around 105% of average. The low elevation snowpacks are beginning to melt, but the high elevation snowpack is still well above average. Fishpole Lake snow course, elevation 9,300 feet, still has 77 inches of snow and 30.1 inches of water (134% of average). Magic, Mackay and Little Wood reservoirs are 80-90% full. Streamflow forecasts call for 105% of average for Magic Reservoir inflow and 100% for Mackay Reservoir inflow. The Little Wood basin is expected to yield 114% of average runoff for the May-July period. Water supplies will be adequate for all water users in the Wood and Lost River basins.

WOOD AND LOST RIVER BASINS
Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
				Chance Of Exceeding *				
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
BIG WOOD at Hailey (1)	MAY-JUL	195	222	235	105	248	278	224
	MAY-SEP	220	250	265	103	280	315	257
BIG WOOD near Bellevue	MAY-JUL	133	152	165	106	179	201	156
	MAY-SEP	145	165	180	106	195	219	170
CAMAS CREEK near Blaine	MAY-JUL	23	28	32	76	36	42	42
	MAY-SEP	24	29	33	76	37	43	43
BIG WOOD blw Magic Dam (2)	MAY-JUL	178	197	210	105	223	242	201
	MAY-SEP	192	212	225	104	238	258	216
LITTLE WOOD nr Carey	MAY-JUL	60	68	74	114	80	88	65
	MAY-SEP	54	76	82	113	88	97	73
BIG LOST at Howell	MAY-JUL	146	166	180	107	194	214	169
	MAY-SEP	167	190	206	106	222	245	195
BIG LOST blw Mackay Reservoir (2)	MAY-JUL	113	127	137	100	147	161	137
	MAY-SEP	144	159	169	100	179	194	169
LITTLE LOST blw Wet Creek	MAY-JUL	24	28	31	113	33	38	27
	MAY-SEP	30	35	39	111	43	48	35

WOOD AND LOST RIVER BASINS
Reservoir Storage (1000 AF) - End of April

WOOD AND LOST RIVER BASINS
Watershed Snowpack Analysis - May 1, 1996

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
MAGIC	191.5	168.7	151.3	167.7	Big Wood ab Magic	7	84	120
LITTLE WOOD	30.0	26.9	19.2	24.6	Camas Creek	2	71	79
MACKAY	44.4	36.0	25.6	34.2	Big Wood Basin Total	9	83	117
					Little Wood River	3	75	119
					Fish Creek	0	0	0
					Big Lost River	6	69	108
					Little Lost River	3	76	103

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

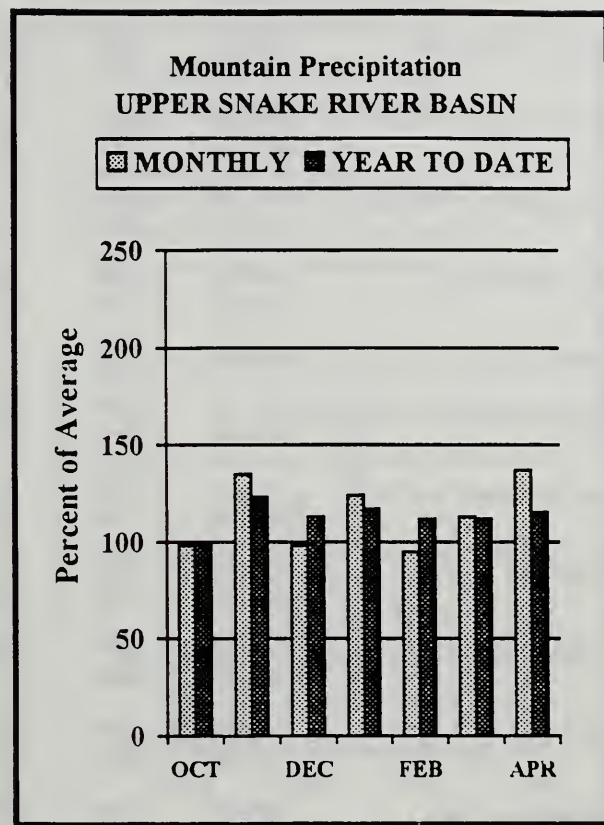
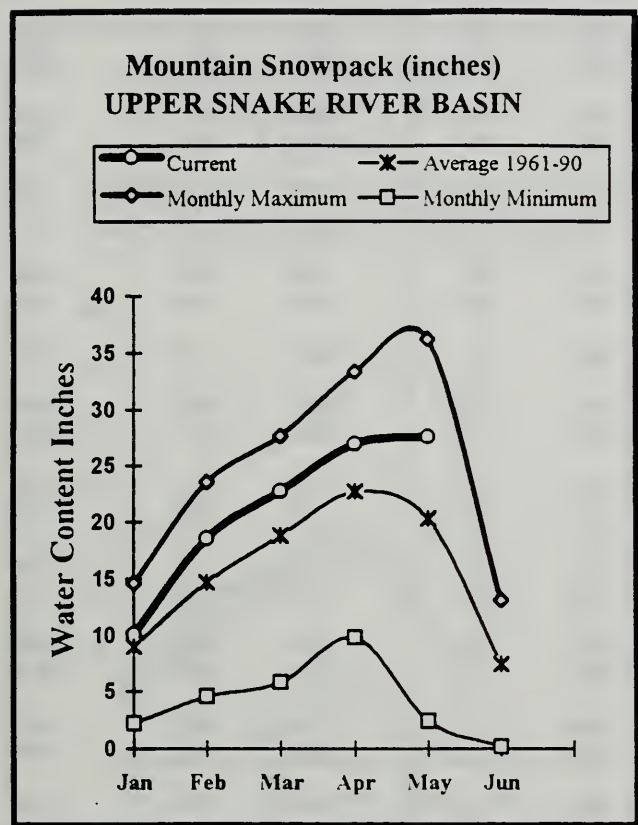
The average is computed for the 1961-1990 base period.

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(2) - The value is natural flow - actual flow may be affected by upstream water management.

UPPER SNAKE RIVER BASIN

MAY 1, 1996



WATER SUPPLY OUTLOOK

The headwaters of the Snake River continue to report the highest snowpacks in the region at 130-150% of average. April precipitation was 137% of average bringing the water year total to 115%. Most of the low elevation SNOTEL sites in the Willow, Blackfoot and Portneuf basins showed a net increase in snow water content during the month; snowpack percentages increased dramatically, however, as a result of cool weather and delayed snowmelt. Currently, these basins are reporting a snowpack of 121-157% of average. Elsewhere in the basin, the Henrys Fork reports 121% of average snowpack while the Teton basin is 131%. Reservoir storage for the eight major reservoirs in the basin is 63% of capacity, 83% of average. The Snake River at Heise is forecast at 130% of average for the May-July period while the Henrys Fork and Teton Rivers are forecast at 120-131%. Flood control releases have been occurring in the upper Snake basin. Palisades Reservoir is expected to start filling around May 1, and American Falls Reservoir is expected to fill in June. Jackson Lake will continue releasing 3,000 cfs and drafting until inflow exceeds outflow levels. As a result of the heavy snowpack conditions, high streamflows are expected well into summer. Water supplies will be abundant for all uses in the Snake River basin.

UPPER SNAKE RIVER BASIN
Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		90% - 70%		Chance Of Exceeding *		30% 10%		
		(1000AF)	(1000AF)	50% (Most Probable) (1000AF) (% AVG.)		(1000AF)	(1000AF)	
HENRYS FORK nr Ashton (2)	MAY-JUL	448	491	520	120	549	592	432
	MAY-SEP	635	692	730	118	768	825	618
HENRYS FORK nr Rexburg (2)	MAY-JUL	1183	1258	1310	129	1362	1437	1016
	MAY-SEP	1521	1616	1680	126	1744	1839	1339
FALLS RIVER nr Squirrel (1,2)	MAY-JUL	332	361	375	117	389	418	322
	MAY-SEP	397	434	450	115	466	503	390
TETON abv S Leigh Ck nr Driggs	MAY-JUL	149	165	176	135	187	203	130
	MAY-SEP	203	223	236	133	249	269	177
TETON nr St. Anthony (2)	MAY-JUL	366	404	430	131	456	494	329
	MAY-SEP	460	505	535	131	565	610	408
SNAKE nr Moran (1,2)	MAY-SEP	938	1022	1060	130	1098	1182	814
SNAKE R abv Palisades Rsvr nr Alpine	MAY-JUL	2493	2663	2778	134	2893	3063	2070
	MAY-SEP	2915	3104	3233	133	3362	3551	2431
GREYS R abv Palisades Reservoir	MAY-JUL	314	342	362	122	382	410	296
	MAY-SEP	368	401	423	123	445	478	345
SALT abv Reservoir nr Etna	MAY-JUL	257	303	335	128	367	413	261
	MAY-SEP	338	390	425	125	460	512	341
PALISADES RESV INFLOW (1,2)	MAY-JUL	3277	3589	3730	129	3871	4183	2889
	MAY-SEP	3883	4232	4390	128	4548	4897	3426
SNAKE nr Heise (2)	MAY-JUL	3613	3844	4000	130	4156	4387	3073
	MAY-SEP	4273	4539	4720	129	4901	5167	3670
SNAKE nr Blackfoot (1,2)	MAY-JUL	4286	4949	5250	132	5551	6214	3981
	MAY-SEP	5589	6305	6630	132	6955	7671	5019
PORTNEUF at Topaz	MAY-JUL	43	50	55	100	60	67	55
	MAY-SEP	67	72	76	100	80	85	76
AMERICAN FALLS RESV INFLOW (1,2)	MAY-JUL	2586	3226	3530	143	3834	4089	2463
	MAY-SEP	2611	3470	3860	143	4250	5109	2700

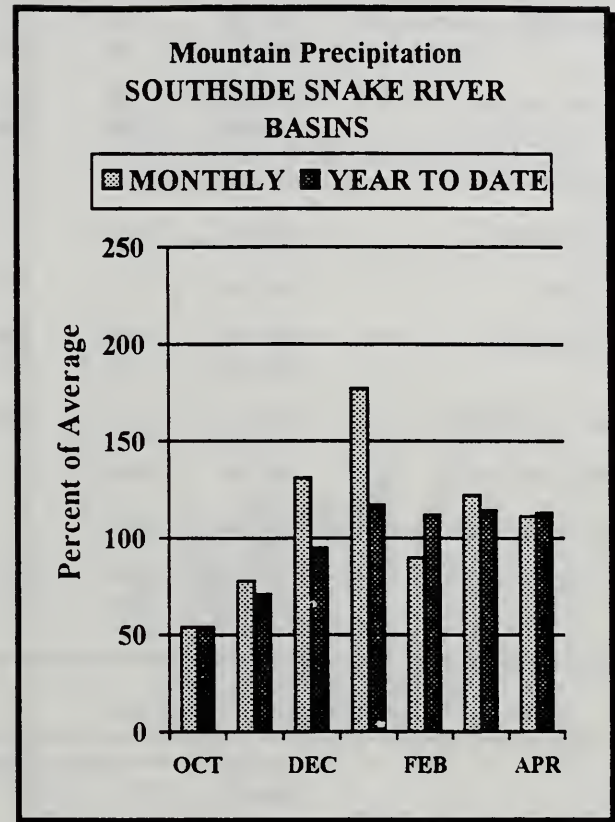
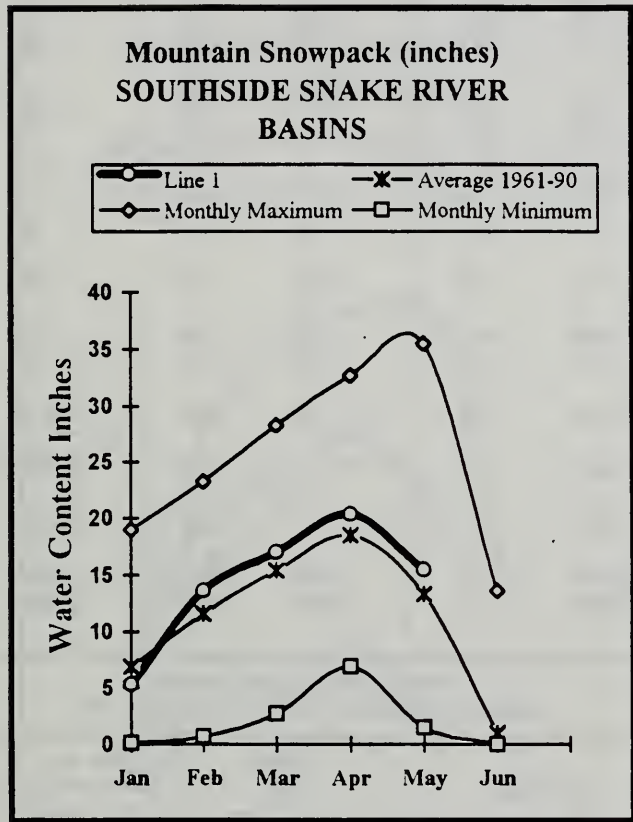
UPPER SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of April					UPPER SNAKE RIVER BASIN Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
HENRYS LAKE	90.4	87.1	80.9	81.8	Camas-Beaver Creeks	2	68	122
ISLAND PARK	135.2	124.0	123.7	125.7	Henrys Fork River	10	91	121
GRASSY LAKE	15.2	13.7	13.6	11.7	Teton River	8	110	130
JACKSON LAKE	847.0	530.7	454.2	456.5	Snake above Jackson Lake	8	117	137
PALISADES	1400.0	406.4	807.8	950.0	Gros Ventre River	3	105	113
RIVER	80.5	73.9	56.0	59.4	Hoback River	6	154	147
BLACKFOOT	348.7	273.7	155.3	274.6	Greys River	4	133	138
AMERICAN FALLS	1672.6	1393.3	1656.9	1542.9	Salt River	5	135	126
					Snake above Palisades	26	128	136
					Willow Creek	4	134	133
					Blackfoot River	2	231	121
					Portneuf River	2	145	157
					Snake abv American Falls	33	129	136

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table. The average is computed for the 1961-1990 base period.

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(2) - The value is natural flow - actual flow may be affected by upstream water management.

SOUTHSIDE SNAKE RIVER BASINS MAY 1, 1996



WATER SUPPLY OUTLOOK

April precipitation was above normal across most of the desert basins in southern Idaho. Precipitation for the water year is 113% of average. Because of the delayed snow melt, most of these basins reported an increase in snowpack percentage as compared to last month. However, all snow measuring sites had a net decrease in snow water content except a few of the higher elevation sites. Snowpacks currently range from 153% of average in the Raft River basin to 87% in the Owyhee basin. Wildhorse and Owyhee reservoirs have already filled. This is the first time since 1986 that Wildhorse Reservoir has filled. Oakley, Salmon Falls and Brownlee reservoirs are about half full. Streamflow forecasts for the May-July runoff period call for 85-113 % of average runoff in these high desert streams. Streamflows through the middle Snake River will be plentiful this spring and summer because of the flood control releases and deep snowpacks. River running opportunities still look promising in these desert rivers. Because of the delayed melt, there is the potential for rapid rises in streams if warm temperatures or rain occur suddenly. Water supplies should be adequate for all users this year.

SOUTHSIDE SNAKE RIVER BASINS
Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	<==== Drier ===== Future Conditions ===== Wetter =====>						
				Chance Of Exceeding *				30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
OAKLEY RESERVOIR Inflow (2)	MAY-JUL	13.2	19.3	24	112	28	34	21
	MAY-SEP	16.0	23	27	113	31	38	24
SALMON FALLS CREEK nr San Jacinto	MAY-JUL	41	51	58	102	66	78	57
	MAY-SEP	44	54	62	100	70	82	62
BRUNEAU nr Hot Spring	MAY-JUL	128	156	175	108	194	222	162
	MAY-SEP	134	164	185	107	206	236	173
OWYHEE nr Gold Ck (2)	MAY-JUL	4.8	11.5	16.0	101	21	27	15.8
OWYHEE nr Owyhee (2)	MAY-JUL	36	51	62	106	72	87	58
OWYHEE near Rome	MAY-JUL	131	159	180	90	202	237	200
OWYHEE RESV INFLOW	MAY-JUL	161	189	210	100	232	266	210
	MAY-SEP	185	216	238	100	261	297	238
SUCCOR CK nr Jordan Valley	MAY-JUL	1.21	3.82	5.60	110	7.38	9.99	5.10
SNAKE RIVER at Weiser (2)	MAY-JUL	3452		3800	100		5652	3793
SNAKE RIVER at Hells Canyon Dam	MAY-JUL	3891		4320	101		6328	4276
SNAKE blw Lower Granite Dam (1,2)	MAY-JUL	13810	16072	17100	101	18128	20390	16940
	MAY-SEP	16695	19312	20500	104	21688	24305	19650

SOUTHSIDE SNAKE RIVER BASINS Reservoir Storage (1000 AF) - End of April					SOUTHSIDE SNAKE RIVER BASINS Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***	This Year	Last Year	Avg	Watershed	Number of Data Sites	This Year as % of Last Yr Average
OAKLEY	77.4	42.8	22.8	39.2		Raft River	1	129
SALMON FALLS	182.6	100.6	49.4	81.4		Goose-Trapper Creeks	3	131
WILDHORSE RESERVOIR	71.5	69.8	33.8	47.2		Salmon Falls Creek	5	110
OWYHEE	715.0	713.0	536.2	619.0		Bruneau River	5	122
BROWNLEE	1419.3	756.9	1163.2	959.9		Owyhee Basin Total	7	72

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

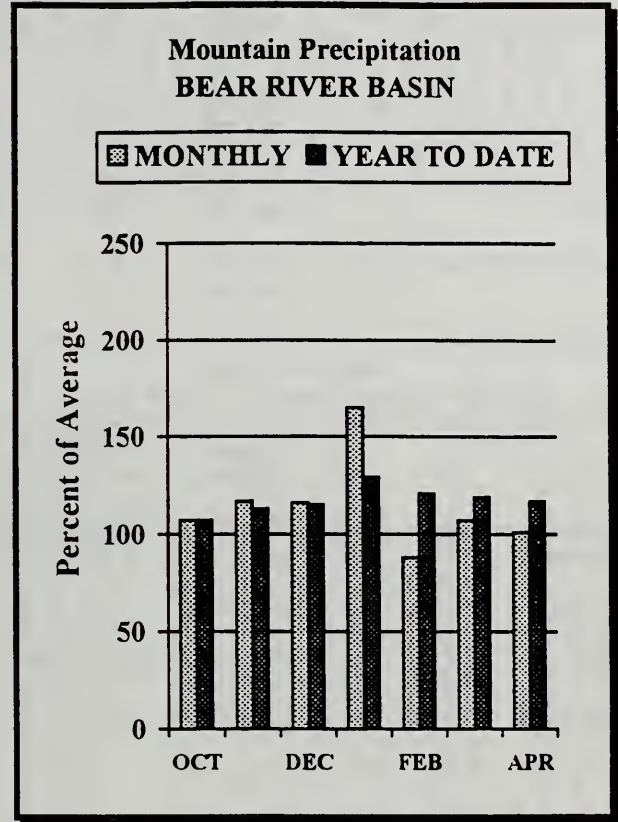
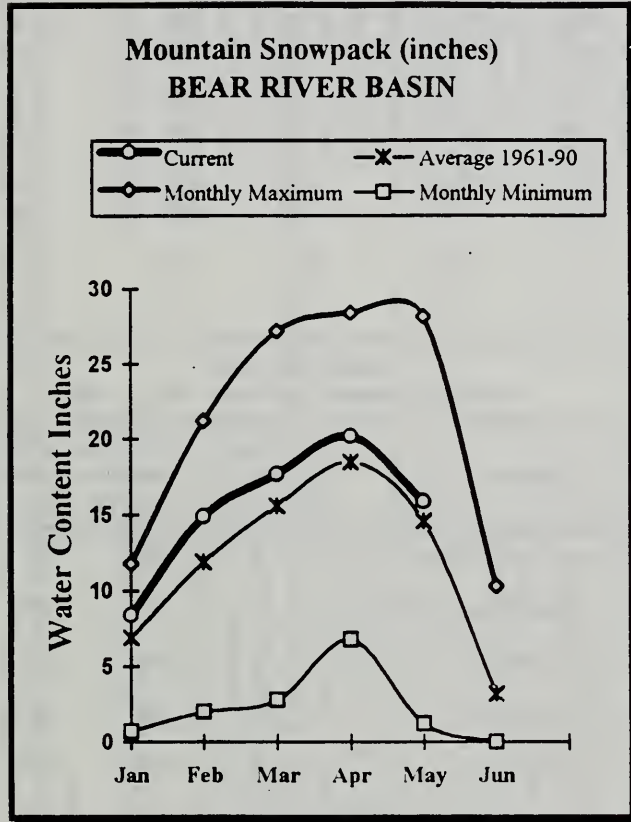
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BEAR RIVER BASIN

MAY 1, 1996



WATER SUPPLY OUTLOOK

April precipitation for the Bear River basin was near normal, bringing the total for the water year to 117% of average. Most SNOTEL sites showed an increase in snow water content during April. Overall the Bear River snowpack is 136% of average. Franklin Basin SNOTEL, elevation 8,040 feet, has 41.1 inches of snow water, 166% of average, the highest since 1986. Montpelier Creek Reservoir is currently storing 3,400 acre-feet, 85% of capacity. Storage in Bear Lake is improving and is currently 722,000 acre-feet, 68% average. Streamflow forecasts call for near normal runoff or better throughout the basin. Montpelier Creek is forecast at 100% of average while the Cub River and Smiths Fork are forecast at 108 and 124%, respectively. The Bear River below Stewart Dam is forecast at 120% of average. Water supplies will be adequate this year in the Bear River basin and the above normal runoff will help increase storage in Bear Lake.

BEAR RIVER BASIN
Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	<<==== Drier ==== Future Conditions ==== Wetter =====>						30-Yr Avg. (1000AF)
				Chance Of Exceeding *				
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
BEAR R nr Randolph, UT	MAY-JUL	75	102	120	136	138	165	88
	MAY-SEP	83	114	135	139	156	187	97
SMITHS FORK nr Border, WY	MAY-JUL	97	107	114	124	121	131	92
	MAY-SEP	119	131	139	128	147	159	109
THOMAS FK nr WY-ID State Line	MAY-JUL	18.2	24	29	107	35	46	27
	MAY-SEP	21	27	32	107	38	49	30
BEAR R blw Stewart Dam nr Montpelier	MAY-JUL	197	241	270	120	299	343	225
	MAY-SEP	230	281	315	119	349	400	264
MONTPELIER CK nr Montpelier (2)	MAY-JUL	6.2	7.8	9.1	100	10.6	13.4	9.1
	MAY-SEP	7.5	9.2	10.6	100	12.2	14.9	10.6

BEAR RIVER BASIN Reservoir Storage (1000 AF) - End of April					BEAR RIVER BASIN Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
WOODRUFF NARROWS	57.3	57.3	24.5	---	Smiths & Thomas Forks	3	125	121
WOODRUFF CREEK	4.0	4.0	4.0	---	Bear River ab WY-ID line	10	119	145
BEAR LAKE	1421.0	722.0	429.1	1059.0	Montpelier Creek	2	135	120
MONTPELIER CREEK	4.0	3.4	3.1	2.2	Mink Creek	1	103	86
					Cub River	1	131	168
					Bear River ab ID-UT line	17	124	136
					Malad River	1	0	0

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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Streamflow Adjustment List For All Forecasts Published In Idaho Basin Outlook Report

Streamflow forecasts are projections of runoff volumes that would have occurred naturally without influences from upstream reservoirs or diversions. These values are referred to as natural or adjusted flows. To make these adjustments, changes in reservoir storage, diversions, and interbasin transfers are added or subtracted from the observed (actual) streamflow volumes. The following list documents the adjustments made to each forecast point in this report.

Panhandle River Basins

KOOTENAI R AT LEONIA, ID
 + LAKE KOOCANUSA (STORAGE CHANGE)
 CLARK FORK R AT WHITEHORSE RAPIDS, ID
 + HUNGRY HORSE (STORAGE CHANGE)
 + FLATHEAD LAKE (STORAGE CHANGE)
 + NOXON RAPIDS RESV (STORAGE CHANGE)
 PEND OREILLE LAKE INFLOW, ID
 + PEND OREILLE R AT NEWPORT, WA
 + HUNGRY HORSE (STORAGE CHANGE)
 + FLATHEAD LAKE (STORAGE CHANGE)
 + NOXON RAPIDS (STORAGE CHANGE)
 + PEND OREILLE LAKE (STORAGE CHANGE)
 PRIEST R NR PRIEST R, ID
 + PRIEST LAKE (STORAGE CHANGE)
 COEUR D'ALENE R AT ENAVILLE, ID - No Corrections
 ST. JOE R AT CALDER, ID - No Corrections
 SPOKANE R NR POST FALLS, ID
 + COEUR D'ALENE LAKE (STORAGE CHANGE)
 SPOKANE R AT LONG LAKE, ID
 + COEUR D'ALENE LAKE (STORAGE CHANGE)

Clearwater River Basin

CLEARWATER R AT OROFINO, ID - No Corrections
 DWORSHAK RESERVOIR INFLOW, ID
 + CLEARWATER R NR PECK, ID
 + DWORSHAK RESV (STORAGE CHANGE)
 - CLEARWATER R AT OROFINO, ID
 CLEARWATER R AT SPALDING, ID
 + DWORSHAK RESV (STORAGE CHANGE)

Salmon River Basin

SALMON R AT SALMON, ID - No Corrections
 SALMON R AT WHITE BIRD, ID - No Corrections

Welser, Payette, Boise River Basins

WEISER R NR WEISER, ID - No Corrections
 SF PAYETTE R AT LOWMAN, ID - No Corrections
 DEADWOOD RESERVOIR INFLOW, ID
 + DEADWOOD R BLW DEADWOOD RESV NR LOWMAN
 + DEADWOOD RESV (STORAGE CHANGE)
 NF PAYETTE R AT CASCADE, ID
 + CASCADE RESV (STORAGE CHANGE)
 NF PAYETTE R NR BANKS, ID
 + CASCADE RESV (STORAGE CHANGE)
 PAYETTE R NR HORSESHOE BEND, ID
 + DEADWOOD RESV (STORAGE CHANGE)
 + CASCADE RESV (STORAGE CHANGE)
 BOISE R NR TWIN SPRINGS, ID - No Corrections
 SF BOISE R AT ANDERSON RANCH DAM, ID
 + ANDERSON RANCH RESV (STORAGE CHANGE)
 MORES CK NR ARROWROCK DAM, ID - No Corrections
 BOISE R NR BOISE, ID
 + ANDERSON RANCH RESV (STORAGE CHANGE)
 + ARROWROCK RESV (STORAGE CHANGE)
 + LUCKY PEAK RESV (STORAGE CHANGE)

Wood and Lost River Basins

BIG WOOD R AT HAILEY, ID - No Corrections
 BIG WOOD R NR BELLEVUE, ID - No Corrections
 CAMAS CK NR BLAINE, ID - No Corrections
 BIG WOOD R BLW MAGIC DAM NR RICHFIELD, ID
 + MAGIC RESV (STORAGE CHANGE)
 LITTLE WOOD R NR CAREY, ID
 + LITTLE WOOD RESV (STORAGE CHANGE)
 BIG LOST R AT HOWELL RANCH NR CHILLY, ID - No Corrections
 Corrections
 BIG LOST R BLW MACKAY RESV NR MACKAY, ID
 + MACKAY RESV (STORAGE CHANGE)
 LITTLE LOST R BLW WET CK NR HOWE, ID - No Corrections

Upper Snake River Basin

HENRYS FORK NR ASHTON, ID
 + HENRYS LAKE (STORAGE CHANGE)
 + ISLAND PARK RESV (STORAGE CHANGE)
 HENRYS FORK NR REXBURG, ID
 + HENRYS LAKE (STORAGE CHANGE)
 + ISLAND PARK RESV (STORAGE CHANGE)
 + DIV FM HENRYS FK BTW ASHTON & ST. ANTHONY
 + DIV FM HENRYS FK BTW ST. ANTHONY & REXBURG
 + GRASSY LAKE (STORAGE CHANGE)
 FALLS R NR SQUIRREL, ID
 + GRASSY LAKE (STORAGE CHANGE)
 TETON R ABV SO LEIGH CK NR DRIGGS, ID - No Corrections
 TETON R NR ST. ANTHONY, ID
 - CROSS CUT CANAL
 + SUM OF DIVERSIONS ABV GAGE
 SNAKE R NR MORAN, WY
 + JACKSON LAKE (STORAGE CHANGE)
 PACIFIC CK AT MORAN, WY - No Corrections
 SNAKE R ABV PALISADES RESV NR ALPINE, WY
 + JACKSON LAKE (STORAGE CHANGE)
 GREYS R ABV PALISADES RESV, WY - No Corrections
 SALT R ABV RESV NR ETNA, WY - No Corrections
 PALISADES RESERVOIR INFLOW, ID
 + SNAKE R NR IRWIN, ID
 + PALISADES RESV (STORAGE CHANGE)
 + JACKSON LAKE (STORAGE CHANGE)
 SNAKE R NR HEISE, ID
 + PALISADES RESV (STORAGE CHANGE)
 + JACKSON LAKE (STORAGE CHANGE)
 SNAKE R NR BLACKFOOT, ID
 + PALISADES RESV (STORAGE CHANGE)
 + JACKSON LAKE (STORAGE CHANGE)
 + DIV FM SNAKE R BTW HEISE AND SHELLY GAGES
 + DIV FM SNAKE R AT TOPAZ, ID - No Corrections
 AMERICAN FALLS RESERVOIR INFLOW, ID
 + SNAKE R AT NEELEY, ID
 + AMERICAN FALLS (STORAGE CHANGE)
 + PALISADES RESV (STORAGE CHANGE)
 + JACKSON LAKE (STORAGE CHANGE)

Southside Snake River Basins

OAKLEY RESERVOIR INFLOW, ID
 + GOOSE CK ABV TRAPPER CK NR OAKLEY, ID
 + TRAPPER CK NR OAKLEY, ID
 SALMON FALLS CK NR SAN JACINTO, NV - No Corrections
 BRUNEAU R NR HOT SPRINGS, ID - No Corrections
 OWYHEE R NR GOLD CK, NV
 + WILDHORSE RESV (STORAGE CHANGE)
 OWYHEE R NR ROME, OR
 + WILDHORSE RESV (STORAGE CHANGE)
 + JORDAN VALLEY RESV (STORAGE CHANGE)
 OWYHEE RESERVOIR INFLOW, OR
 + OWYHEE R BLW OWYHEE DAM, OR
 + OWYHEE RESV (STORAGE CHANGE)
 + DIV TO NORTH AND SOUTH CANALS
 SUCCOR CK NR JORDAN VALLEY, OR - No Corrections
 SNAKE R - KING HILL, ID - No Corrections
 SNAKE R NR MURPHY, ID - No Corrections
 SNAKE R AT WEISER, ID - No Corrections
 SNAKE R AT HELLS CANYON DAM, ID
 + BROWNLEE RESV (STORAGE CHANGE)

Bear River Basin

BEAR R NR RANDOLPH, UT
 + SULPHUR CK RESV (STORAGE CHANGE)
 + CHAPMAN CANAL DIVERSION
 + WOODRUFF NARROWS RESV (STORAGE CHANGE)
 SMITHS FORK NR BORDER, WY - No Corrections
 THOMAS FORK NR WY-ID STATELINE - No Corrections
 BEAR R BLW STEWART DAM, ID
 + SULPHUR CK RESV (STORAGE CHANGE)
 + CHAPMAN CANAL DIVERSION
 + WOODRUFF NARROWS RESV (STORAGE CHANGE)
 + TOTAL OF 12 CANALS
 + WESTFORK CANAL
 + DINGLE INLET CANAL
 + RAINBOW INLET CANAL
 MONTPELIER CK NR MONTPELIER, ID
 + MONTPELIER CK RESV (STORAGE CHANGE)
 CUB R NR PRESTON, ID - No Corrections

RESERVOIR CAPACITY DEFINITIONS - Different agencies use various definitions when reporting reservoir capacity and contents. Reservoir storage terms include dead, inactive, active, and surcharge storage. The table below lists these volumes for each reservoir in this report, and defines the storage volumes that NRCS uses when reporting capacity and current reservoir storage. In most cases, NRCS reports usable storage, which includes active and inactive storage.

BASIN/ RESERVOIR	DEAD STORAGE	INACTIVE STORAGE	ACTIVE STORAGE	SURCHARGE STORAGE	NRCS CAPACITY	NRCS FIGURES INCLUDE
PANHANDLE REGION						
HUNGRY HORSE	39.73	--	3451.00	--	3451.0	ACTIVE
FLATHEAD LAKE	Unknown	--	1791.00	--	1971.0	ACTIVE
NOXON RAPIDS	Unknown	--	335.00	--	335.0	ACTIVE
PEND OREILLE	406.20	112.40	1042.70	--	1561.3	DEAD + INACTIVE + ACTIVE
COEUR D'ALENE	--	13.50	225.00	--	238.5	INACTIVE + ACTIVE
PRIEST LAKE	20.00	28.00	71.30	--	119.3	DEAD + INACTIVE + ACTIVE
CLEARWATER BASIN						
DWORSHAK	--	1452.00	2007.00	--	3459.0	INACTIVE + ACTIVE
WEISER/BOISE/PAYETTE BASINS						
MANN CREEK	1.61	0.24	11.10	--	11.1	ACTIVE
CASCADE	--	50.00	653.20	--	703.2	INACTIVE + ACTIVE
DEADWOOD	1.50	--	161.90	--	161.9	ACTIVE
ANDERSON RANCH	29.00	41.00	423.18	--	484.2	INACTIVE + ACTIVE
ARROWROCK	--	--	286.60	--	286.6	ACTIVE
LUCKY PEAK	--	28.80	264.40	13.80	293.2	INACTIVE + ACTIVE
LAKE LOWELL	--	8.00	169.10	--	169.1	ACTIVE
WOOD/LOST BASINS						
MAGIC	--	--	191.50	--	191.5	ACTIVE
LITTLE WOOD	--	--	30.00	--	30.0	ACTIVE
MACKAY	0.13	--	44.37	--	44.4	ACTIVE
UPPER SNAKE BASIN						
HENRYS LAKE	--	--	90.40	--	90.4	ACTIVE
ISLAND PARK	0.40	--	127.30	7.90	135.2	ACTIVE + SURCHARGE
GRASSY LAKE	--	--	15.18	--	15.2	ACTIVE
JACKSON LAKE	--	--	847.00	--	847.0	ACTIVE
PALISADES	44.10	155.50	1200.00	--	1400.0	DEAD + INACTIVE + ACTIVE
RIRIE	4.00	6.00	80.54	10.00	80.5	ACTIVE
BLACKFOOT	--	--	348.73	--	348.7	ACTIVE
AMERICAN FALLS	--	--	1672.60	--	1672.6	ACTIVE
SOUTHSIDE SNAKE BASINS						
OAKLEY	--	--	77.40	--	77.4	ACTIVE
SALMON FALLS	48.00	--	182.65	--	182.6	ACTIVE
WILDHORSE	--	--	71.60	--	71.6	ACTIVE
OWYHEE	406.83	--	715.00	--	715.0	ACTIVE
BROWNLEE	0.45	444.00	976.30	--	1419.3	INACTIVE + ACTIVE
BEAR RIVER BASIN						
WOODRUFF NARROWS	--	1.50	57.30	--	57.3	ACTIVE
WOODRUFF CREEK	--	4.00	4.00	--	4.0	ACTIVE
BEAR LAKE	--	--	1421.00	--	1421.0	ACTIVE
MONTPELIER CREEK	0.21	--	3.84	--	4.0	DEAD + ACTIVE

Interpreting Streamflow Forecasts

Introduction

Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflow volumes are for streamflow volumes that would occur naturally without any upstream influences. Water users need to know what the different forecasts represent if they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts.

Most Probable (50 Percent Chance of Exceeding) Forecast. This forecast is the best estimate of streamflow volume that can be produced given current conditions and based on the outcome of similar past situations. There is a 50 percent chance that the streamflow volume will exceed this forecast value. There is a 50 percent chance that the streamflow volume will be less than this forecast value.

The most probable forecast will rarely be exactly right, due to errors resulting from future weather conditions and the forecast equation itself. This does not mean that users should not use the most probable forecast: it means that they need to evaluate existing circumstances and determine the amount of risk they are willing to take by accepting this forecast value.

To Decrease the Chance of Having Too Little Water

If users want to make sure there is enough water available for their operations, they might determine that a 50 percent chance of the streamflow volume being lower than the most probable forecast is too much risk to take. To reduce the risk of not having enough water available during the forecast period, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded (or possibly some point in-between). These include:

70 Percent Chance of Exceeding Forecast. There is a 70 percent chance that the streamflow volume will exceed this forecast value. There is a 30 percent chance the streamflow volume will be less than this forecast value.

90 Percent Chance of Exceeding Forecast. There is a 90 percent chance that the streamflow volume will exceed this forecast value. There is a 10 percent chance the streamflow volume will be less than this forecast value.

To Decrease the Chance of Having Too Much Water

If users want to make sure they don't have too much water, they might determine that a 50 percent chance of the streamflow being higher than the most probable forecast is too much of a risk to take. To reduce the risk of having too much water available during the forecast period, users can base their operational decisions on one of the forecasts with a smaller chance of being exceeded. These include:

30 Percent Chance of Exceeding Forecast. There is a 30 percent chance that the streamflow volume will exceed this forecast value. There is a 70 percent chance the streamflow volume will be less than this forecast value.

10 Percent Chance of Exceeding Forecast. There is a 10 percent chance that the streamflow volume will exceed this forecast value. There is a 90 percent chance the streamflow volume will be less than this forecast value.

Using the forecasts - an example

Using the Most Probable Forecast. Using the example forecasts shown below, users can reasonably expect 36,000 acre-feet to flow past the gaging station on the Mary's River newa Deeth between March 1 and July 31.

Using the Higher Exceedance Forecasts. If users anticipate a somewhat drier trend in the future (monthly and seasonal weather outlooks are available from the National Weather Service every two weeks), or if they are operating at a level where an unexpected shortage of water could cause problems, they might want to plan on receiving only 20,000 acre-feet (from the 70 percent chance of exceeding forecast). In seven out of ten years with similar conditions, streamflow volumes will exceed the 20,000 acre-foot forecast.

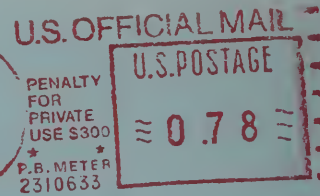
If users anticipate extremely dry conditions for the remainder of the season, or if they determine the risk of using the 70 percent chance of exceeding forecast is too great, then they might plan on receiving only 5000 acre-feet (from the 90 percent chance of exceeding forecast). Nine out of ten years with similar conditions, streamflow volumes will exceed the 5000 acre-foot forecast.

Using the Lower Exceedance Forecasts. If users expect wetter future conditions, or if the chance that live out of every ten years with similar conditions would produce streamflow volumes greater than 36,000 acre-feet was more than they would like to risk, they might plan on receiving 52,000 acre-feet (from the 30 percent chance of exceeding forecast) to minimize potential flooding problems. Three out of ten years with similar conditions, streamflows will exceed the 52,000 acre-foot forecast.

In years when users expect extremely wet conditions for the remainder of the season and the threat of severe flooding and downstream damage exists, they might choose to use the 76,000 acre-foot (10 percent chance of exceeding) forecast for their water management operations. Streamflow volumes will exceed this level only one year out of ten.

UPPER HUMBOLDT RIVER BASIN										
FORECAST POINT	FORECAST PERIOD	STREAMFLOW FORECASTS								
		← DRIER			FUTURE CONDITIONS			→ WETTER		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	30% (1000AF)	10% (1000AF)	25 YR (1000AF)			
MARY'S RIVER nr Deeth	MAR-JUL	5.0	20.0	36	77	52	76	47		
	APR-JUL	8.0	17.0	31	74	45	67	42		
LAMOILLE CREEK nr Lamolle	MAR-JUL	6.0	16.0	24	79	32	43	31		
	APR-JUL	4.0	15.0	22	75	30	41	30		
NR HUMBOLDT RIVER at Devils Gate	MAR-JUL	6.0	12.0	43	73	74	121	59		

For more information concerning streamflow forecasting ask your local NRCS field office for a copy of "A Field Office Guide for Interpreting Streamflow Forecasts".



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